which should claim attention, and I obtained another sheep, to the common carotid of which I applied a silver-wire ligature, tying it incompletely after the manner of the silk ligature; but I was very careful to tie it loosely. I tied it tight enough only to diminish the canal of the artery to a considerable degree, but avoided, as nearly as I could judge, a complete closure.

On cutting down afterwards upon the cicatrix, I could scarcely discover whereabouts the ligature had been applied, so small was the amount of irritation it had produced. The plug in this case was more perfect than in either of the preceding cases. There was no abscess, the fibrinous deposit being just sufficient to cover the ligature. There was, on making the section, just a drop of something in which my friend Dr. Rogers, who has examined several specimens for me, thought he found one or two globules of a doubtful nature. At all events, the inflammatory action was exceedingly slight, only enough to be serviceable. The result, so far as occlusion, extent, and firmness of the plug are concerned, is very much better than in either of the other cases.

I am very unwilling, at present, to make any deductions from these experiments. They form only a small part of a series which I have in progress, each with a different ligature applied in a different manner. So far as these experiments go, other things being equal, it seems to be demonstrated, 1st, *that the metallic ligature does not always reside quietly where it is placed.* The last experiment demonstrates, 2d, *that it is not always necessary for complete occlusion of the artery to tie the ligature so tigthly as to divide the middle and internal coats.* 3d. The last experiment is very suggestive, that a silver-wire ligature applied so loosely as to produce no lesion of the artery, nor even to completely arrest the circulation, may suffice for the cure of aneurism, when an ordinary ligature would be rendered inexpedient by the condition of the arterial coats.—*Medical Record*, Dec. 2, 1867.

Observations and Experiments on Living Organisms in Heated Water.—Dr. Jeffries Wyman gave, in the *Am. Journ. of Science and Arts* for July, 1862, an account of some very interesting experiments on the formation of infusoria in boiled solutions of organic matter, which showed that such solutions, exposed only to air which had passed through tubes heated to a redness, became the seat of infusorial life. (See No. of this Journal for October, 1862, p. 567.)

This same eminent physiologist and most reliable observer has been further pursuing his investigations, and has published an account of them in our esteemed contemporary, the *American Journal of Science and Arts* for September last.

Dr. W. remarks: "Abundant proof has been brought forward to show that the spores or germs of infusoria exist in the air in quantities amply sufficient to account for the presence of living organisms in solutions freely exposed.

"There can therefore be no certainty of the existence of spontaneous generation in a given solution, until it can be shown that this has been freed of all living organisms which it contained at the beginning of the experiment, and kept free of all such from without during the progress of it. On the other hand, this kind of generation becomes probable, whenever it is made certain that infusoria do appear in solutions, in which the conditions just mentioned have been complied with. We say probable, because their appearance under such circumstances would not amount to a proof. The absolute proof of spontaneous generation must come from the formation of living organisms out of *inorganic* matter. If infusoria are generated in solutions of organic matter, independently of spores or germs, the question may be fairly raised whether we do not begin the experiment with materials in which life already exists, even though this material is not in the form of distinct organisms.

"The issue between the advocates and the opponents of this doctrine clearly turns on the extent to which it can be proved that living beings resist the action of water at a high temperature, or on what Pouchet calls 'vital resistance,' for in nearly all the observations hitherto made, heated water has been the agent for the destruction of infusorial life preliminary to the beginning of an experiment.

"The observations and experiments contained in this communication have not been brought together either for sustaining or refuting the doctrine just referred to, but partly with the view of testing the accuracy of the experiments formerly made, and chiefly for the purpose of determining how far the life of certain kinds of low organisms is either sustained or destroyed in water which has been raised to a high temperature, a result which must be reached before spontaneous generation can be either asserted or denied. The evidence which will be adduced is derived from the following sources:—

"1. From the phenomena of hot springs.

"2. From the appearance or non-appearance of infusoria in solutions boiled for different periods of time, and exposed only to pure air.

"3. From the observed action of heat on the living organisms which the solution experimented with was known to contain."

The following are the conclusions which Dr. W. thinks justified from the observations and experiments recorded in his paper:—

"1. In thermal waters plants belonging to the lower kinds of Algæ live in water the temperature of which, in some instances, rises as high as 208° F.

"2. Solutions of organic matter boiled for twenty-five minutes, and exposed only to air which had passed through iron tubes heated to redness, became the seat of infusorial life.

"3. Similar solutions contained in flasks hermetically sealed, and then immersed in boiling water for periods varying from a few minutes to four hours, also became the seat of infusorial life. The infusoria were chiefly Vibrios, Bacteriums, and Monads.

"4. No ciliated infusoria, unless Monads are such, appeared in the experiments referred to in the above conclusions.

"5. No infusoria of any kind appeared if the boiling was prolonged beyond a period of five hours.

"6. Infusoria having the faculty of locomotion lost this when exposed in water to a temperature of from 120° to 134° F.

"If Vibrios, Bacteriums, and Monads are added to a clear and limpid organic solution, this becomes turbid from their multiplication in from one to two days. If, however, they have been previously boiled, the solution does not become turbid, until from one to two days later, and in some of the experiments not sooner than does the same solution to which no infusoria have been added."

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Hyposulphite of Soda in Malarial Diseases.—In our No. for April, 1866, p. 388, a case is related by Dr. T. Leavitt, of obstinate remittent fever which had resisted the use of sulphate of quinia, and was cured by the hyposulphite of soda. Dr. N. L. North (*N. Y. Med. Journ.*, March, 1867) and Dr. W. H. Baxter also bear testimony to the efficacy of this remedy, and Dr. S. E. Hampton states (*Cincinnati Lancet and Observer*, Nov. 1867) that of sixty-six cases of malarious fevers in which he has used that remedy, it has failed in one only. Several of these cases he has recorded in the journal last referred to.

Dr. W. E. Turner, of Leavenworth, states (*Leavenworth Medical Herald*, Nov. 1867) that while in practice in Southern Illinois, where periodical fevers were very prevalent, he used the hyposulphite and sulphite of soda in over 125 cases with almost unvarying success and with better after results than followed the use of quinia. He gave the salts in doses of from 15 to 20 grains every two hours, for an adult.

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Liquor Ferri Persulphatis as an Anti-periodic.—Dr. G. H. Lenoir states (*Southern Journ. Med. Sc.*, Nov. 1867) that he has tried the liquor ferri persulphatis in several cases of intermittent fever, where quinia had failed, and even produced unpleasant effects.

"Immediately after the administration of the iron the chills ceased, and in but one case was there a recurrence of the malady, and in that the patient had but one chill, after which there was no symptom of a recurrence."

He gave the solution in doses of from eight to fifteen drops every four or six hours, generally preceded by a full dose of pil. cathart. comp.

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Treatment of Cancer by Injection of Acetic Acid.—Dr. F. D. Lente, of Cold Spring, N. Y., reports (*New York Med. Journ.*, Dec. 1867) two cases treated